

CLAIMS

1. An inducer disposed upstream of a main impeller, characterized in that a blade angle from a tip to a hub at a blade leading edge is substantially the same as an inlet
5 flow angle at a designed flow rate.

2. The inducer according to claim 1, characterized in that a blade angle distribution on said tip from the blade leading edge to a blade trailing edge is such that a rate of reduction of said blade angle toward said blade leading edge is greater upstream of
10 a region in the vicinity of a throat than downstream of the region in the vicinity of said throat, and a rate of change of said blade angle is smaller in a range from the region in the vicinity of the throat toward a region in the vicinity of a distance 0.9 in a non-dimensional flow direction than upstream of the region in the vicinity of said throat.

3. The inducer according to claim 2, characterized in that a blade angle distribution on said hub from the blade leading edge to the blade trailing edge has an inflection point in the vicinity of the throat, and is such that a rate of change of the blade angle is small upstream of the throat, and a rate of increase of the blade angle is large
15 along the direction of a flow downstream of said throat.

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4. A pump with an inducer, characterized in that said pump having a main impeller mounted on a rotatable shaft; and

said inducer according to any one of claims 1 through 3 is disposed upstream of said main impeller so as to align its axis with an axis of said main impeller.

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REPLACED BY
ART 34 AMDE